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State of Utah
DEPARTMENT OF ENVIRONMENTAL QUALITY
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CC: Wayne Hodson
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JUN 10 1993

DIVISION OF
GAS & MINING

June 1, 1993

Mr. Dave Hodson
Barneys Canyon Mine
P.O. Box 311
Bingham Canyon, UT 84006-0311

RE: Cyanide in mine water, Correspondence
of March 1, 1993 Concerning Heap
Leach Neutralization; Ground Water
Permit UGW350001

Dear Mr. Hodson:

The ground water monitoring report for the final quarter of 1992 dated January 29, 1993 reports cyanide in BCSPS-103, a water sample from the mine pit, not the leach operation. We believe the presence of cyanide in the mine water warrants further investigation. We assume that ammonium nitrate is used for blasting in your pits and that it is also used for blasting at the Copperton copper pit. If there is a correlation between blasting with ammonium-nitrate and the presence of cyanide in the pits, there should be cyanide in the Copperton pit also. If you haven't checked this yet, please collect several samples and send us the results with the August 1993 monitoring report. If you have checked this previously please send us the results.

With reference to your letter of March 1, 1993 regarding neutralization, we are committed to the ground water requirements stipulated in the ground water discharge permit. The criteria used in this permit are drafted after the original construction permit agreed to March 14, 1989. If the heap leach regulations are adopted before neutralization of any pad at your site, the requirements of the heap leach regulations or other arrangements agreed to by the Division will prevail. We understand that neutralization of pad No. 1 is planned to begin in about 2 to 3 years. The ground water permit states:

CLOSURE AND CONTINGENCY REQUIREMENTS.

1. The neutralization criteria for the facility will either be as adopted in rules by the Water Quality Board at the time of decommissioning or as approved in writing by the Executive Secretary at the time of decommissioning if prior to adoption of

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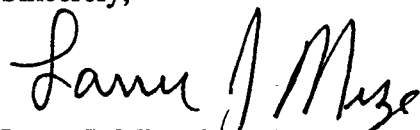
rules. In no case shall the neutralization criteria for this heap leach project result in degradation of the surface or ground water quality including beneficial uses thereof in the vicinity.

Neutralization of ore heaps based on the approved criteria must be verified in three (3) samples of heap leach pad rinsate reasonable spaced during a twenty-four (24) hour period. The procedure must be submitted in the neutralization plan for review and approval. Verification of neutralization by analysis of the spent ore is waived on the condition that the heap leach area remains fenced for at least three (3) years once neutralized.

2. A closure document shall be submitted for review and approval six (6) months prior to beginning of neutralization of any pads or ponds in the project, and to include the following:
 - (a) Copies of plans for any soil capping or covering the treated ore, filed with other agencies.
 - (b) Pond closure and pipeline removal.

The meeting held April 22, 1993 discussed ongoing research for your heap neutralization which is apparently several years away. The ground water permit requires a closure document six months prior to beginning of neutralization and should include all items listed under Number 2 above.

Sincerely,



Larry J. Mize, P.E., Manager
Ground Water Protection Section

LJM:MC:gt

cc: Div. Oil, Gas & Mining ✓
Kent Miner, SL City/County Health Dept.

P:BCMTGRPT.LTR
FILE:BARNEYS CANYON